

REMARKS

The Office Action dated February 7, 2006 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 1-21 are pending and under consideration.

REJECTION UNDER 35 U.S.C. § 103:

In the Office Action, at page 2, claims 1-7, 9-15, and 17-21 were rejected under 35 U.S.C. § 103 as being unpatentable over U. S. Patent No. 5,615,364 to Marks ("Marks"), in view of U.S. Patent No. 5,649,089 to Kilner ("Kilner"), U.S. Patent No. 6,411,969 to Tam ("Tam"), and U.S. Patent No. 6,105,021 to Berstis ("Berstis"). The Office Action took the position that Mark and Kilner recite the recitations of independent claims 1, 9, and 17 except for "a magic number is kept to distinguish any tar and zipped file with the standby database." The Office Action relies on Tam and Berstis as providing for such claim recitation. This rejection is traversed and reconsideration is requested.

Independent claim 1, upon which claims 2-8 are dependent, recites a method for providing persistency fault tolerant data stored in a database on a device in a networked environment for an external application. The device has an active processor system and a standby processor system. The method includes maintaining a checksum for each record in an active database located in the active processor system, checking the checksum during initialization, providing an identical standby copy of an the active database located on the active processor system, on the standby processor system as a standby database,

and monitoring the active processor for a failure, assuming control by the standby processor system when the failure is detected. The switching from the active database to the standby database is transparent to the external application and a magic number is kept to distinguish any tar and zipped file with the standby database.

Independent claim 9, upon which claims 10-16 are dependent, recites a system for providing persistency fault tolerant data stored in a database on a device in a networked environment for an external application, the device having an active processor system and a standby processor system. The system includes checksum means for maintaining a checksum for each record in an active database located in the active processor system and checking the checksum during initialization, standby means for providing an identical standby copy of the active database located on the active processor system, on the standby processor system as a standby database, monitor means for monitoring the active processor for a failure, control means for assuming control by the standby processor system when the failure is detected. The switching from the active database to the standby database is transparent to an external application and a magic number is kept to distinguish any tar and zipped file with the standby database.

Independent claim 17, upon which claims 18-21 are dependent, recites a device providing persistency fault tolerant data stored in a database and having an active processor system and a standby processor system. The device includes a checksum unit maintaining a checksum for each record in an active database located in the active processor system and checking the checksum during initialization, and a standby unit

providing an identical standby copy of an the active database located on the active processor system, on the standby processor system as a standby database. The device also includes a monitor unit monitoring the active processor for a failure, and a control unit assuming control by the standby processor system when the failure is detected, wherein switching from the active database to the standby database is transparent to an external application and a magic number is kept to distinguish any tar and zipped file with the standby database.

As will be discussed below, the cited reference of Marks, Kilner, Tam, and Bertis fail to disclose or suggest the elements of any of the presently pending claims.

Marks generally describes primary and backup database operation. Upon changes to the database, the primary and backup communication agents communicate with each other to automatically update the backup database. See column 3, lines 1-15. If malfunction occurs, the backup database takes over. See column 3, lines 15-20. Also, Marks describes that backup communications are synchronized to primary communications without any manual initialization or re-inputting of any data. See column 4, lines 59-63.

In turn, Kilner describes a redundant controller system having an active controller 112 with an active database and a standby controller 115 with a standby database. See column 2, lines 56-67. The system maintains a cumulative checksum of the entire database in a network controller 112 for substantially real time tracking changes to a database by providing a record checksum for a record and incorporating uniquely and

reversibly the record checksum for the record into a cumulative checksum for the database. See column 3, lines 51-64. In addition, Kilner describes a method of updating a standby database, in which, at step 300 an initialization sequence is triggered, and at step 302, the network controller loads or transfers the database from permanent storage. See column 4, lines 55-67.

Tam generally describes a method for developing back-up copies of a source database by providing incremental and accumulate dump commands from various multiple-Users which enable a selection of certain files which are identified independently of time-factor for dumping selectively either onto a separate destination medium of disk or tape. Tam provides that the dump of a database is done to tape or disk depending on what type of storage resources are available. See column 6, lines 27-35.

Berstis, in turn, provides conducting a search of a document database containing compressed and non-compressed files. If a document is compressed, it is decompressed to produce a plain text version of a document. The plain text is searched according to search parameters. If the compressed file is not a zip file, a test determines whether the compressed file is a tar file. Tar files are known compressed files used in UNIX based systems. See column 7, lines 58-60.

However, Tam does not refer to a magic number used to distinguish any tar and zipped files in a standby database. Instead, Tam simply provides identification information being provided associated with transfer or dumping of files from disk to tape. Specifically, a combination of Marks, Kilner, Tam, and Berstis would provide a primary

and backup database operation in a redundant controller system maintaining a cumulative checksum of the entire database in a network controller. Tam would provide to the combination of the references that when dumping a zip file or a tar file to a tape, information would need to be used to identify the tape. This information would include the tape name, the cycle number, the version number, workers, the serial number, compression and non-compression, the density, and the SCRATCHPOOL option. See column 6, lines 27-35 of Tam. If a disk is used, according to Tam, it is only necessary to specify the file title for the entire dump and the number of DUMP files. See column 6, lines 36-38 of Tam. However, there is no teaching or suggestion in the combination of Marks, Kilner, Tam, or Berstis that the information would be kept to distinguish any tar and zipped file with the standby database.

When dumping is done to tape, according to Tam, it is necessary to furnish information common to any disk-to-tape process and this information would include the tape name, the cycle number, the version number, workers, the serial number, compression and non-compression, the density, and the SCRATCHPOOL option. Emphasis added. See column 6, lines 27-35. The information being provided in Tam is not to distinguish any tar and zipped file with the standby database. Rather, the information provided is one that is necessary to a disk-to-tape process.

Accordingly, a combination of Marks, Kilner, Tam, and Berstis would not teach or suggest, at least, “switching from the active database to the standby database is

transparent to an external application and a magic number is kept to distinguish any tar and zipped file with the standby database,” as recited in independent claims 1, 9, and 17.

Additionally, the use of four references to make a rejection of the present claims is an indicator that the Office Action is attempting to use an improper piecemeal analysis of various references in order to make this rejection. Specifically, as commonly understood, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art... “[the Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” See In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992). In addition, the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. Id. at 1783-84. “One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” See In re Fine, 837 F.2d 1071, 1075, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988).

Accordingly, it is respectfully asserted that the use of four references is an improper piecemeal analysis and, accordingly, the prima facie obviousness rejection fails. It is respectfully requested that claims 1-7, 9-15, and 17-21 be allowed.

Furthermore, in the Office Action, at page 5, claims 8 and 16 were rejected under 35 U.S.C. § 103 as being unpatentable over Marks, Kilner, U.S. Patent No. 5,317,742 to

Bapat ("Bapat"), and publication "Structure of Management Information Version 2(SMlv2)" by McCloghrie et al. ("McCloghrie"). The Office Action took the position that a combination of Marks, Kilner, Bapat, and McCloghrie disclose all the aspects of dependent claims 8 and 16. It is respectfully asserted that, for at least the reasons provided herein below, Marks, Kilner, Bapat, and McCloghrie fail to teach or suggest the recitations of the pending claims.

Dependent claim 8 depends from independent claim 1 and dependent claim 16 depends from independent claim 9. Because the combination of Marks, Kilner, Bapat, and McCloghrie must teach, individually or combined, all the recitations of the base claim and any intervening claims of dependent claims 8 and 16, the arguments presented above supporting the patentability of independent claims 1 and 9 over Marks and Kilner are incorporated herein.

Bapat generally describes a Structure of Management Information (SMI) translated to a schema definition which is used to design the formats and templates of data structures within a database, within which actual information content will be stored. See column 7, lines 59-64. In turn, McCloghrie generally describes Internet protocol standards. However, Bapat and McCloghrie do not cure the deficiencies of Marks and Kilner, and, therefore, a combination thereof fails to teach or suggest all the recitations of independent claims 1 and 9. For instance, similarly to Marks and Kilner, Bapat and McCloghrie are devoid of any teaching or suggestion providing "switching from the active database to the standby database is transparent to an external application and a

magic number is kept to distinguish any tar and zipped file with the standby database,” as recited in independent claims 1 and 9.

Thus, a combination of Marks, Kilner, Bapat, and McCloghrie would fail to teach or suggest all the recitations of independent claims 1 and 9. It is respectfully requested that independent claims 1 and 9 and related dependent claims 8 and 16, respectively, be allowed.

CONCLUSION:


In view of the above, Applicants respectfully submit that the claimed invention recites subject matter which is neither disclosed nor suggested in the cited prior art. Applicants further submit that the subject matter is more than sufficient to render the claimed invention unobvious to a person of skill in the art. Applicants therefore respectfully request that each of claims 1-21 be found allowable and that this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time.

Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


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